

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
8 July 2004 (08.07.2004)

PCT

(10) International Publication Number  
**WO 2004/056571 A1**

(51) International Patent Classification<sup>7</sup>: **B41J 2/05, 2/175**

(21) International Application Number:  
PCT/IT2003/000842

(22) International Filing Date:  
19 December 2003 (19.12.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
TO 2002 A 001113  
23 December 2002 (23.12.2002) IT

(71) Applicant (for all designated States except US):  
**OLIVETTI I-JET S.P.A.** [IT/IT]; Località Le Vieux,  
I-11020 Arnad (IT).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **SCARDOVI,**

Alessandro [IT/IT]; c/o Olivetti I-Jet S.p.A., Località Le Vieux, I-11020 Arnad (IT). **CONTA, Renato** [IT/IT]; c/o Olivetti I-Jet S.p.A., Località Le Vieux, I-11020 Arnad (IT).

(74) Agent: **BOBBIO, Giampiero**; c/o Telecom Italia S.p.A.-CLA Sede di Ivrea, Via G. Jervis, 77, I-10015 Ivrea (TO) (IT).

(81) Designated States (*national*): AU, BR, CA, CN, HU, ID, IL, IN, JP, KR, MX, RU, SG, TR, US, YU, ZA.

(84) Designated States (*regional*): European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR).

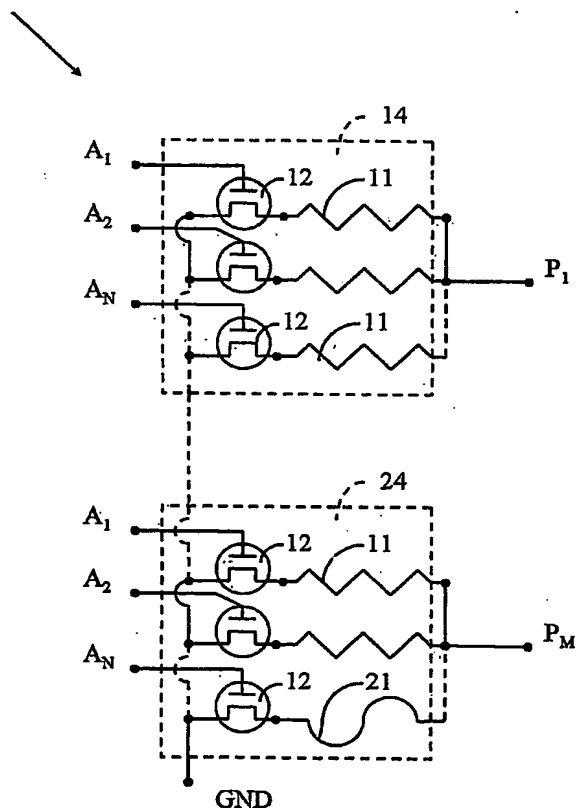
**Declarations under Rule 4.17:**

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AU, BR, CA, CN, HU, ID, IL, IN, JP, KR, MX, RU, SG, TR, YU,

[Continued on next page]

(54) Title: INTEGRATED PRINthead WITH ENCODING CIRCUIT

20



(57) Abstract: Ink jet printhead comprising a driving and encoding circuit (20) having a grid-like structure, including a plurality of inputs (24), a plurality of selecting elements (12), a plurality of actuating elements (11) and at least one identifying element (21) of said printhead. Each identifying element (21) is associated with a corresponding selecting element (12) and corresponds to nodes arranged along a row or column of said grid-like structure, and is scanned, together with said actuating elements (11), during a preliminary checking step.



ZA, European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR)

— of inventorship (Rule 4.17(iv)) for US only

**Published:**

— with international search report

— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.